HAER OHIO 18-CLEV, 18-

HISTORIC AMERICAN ENGINEERING RECORD

INDEX TO PHOTOGRAPHS

ADDENDUM TO
DIVISION AVENUE PUMPING
STATION & FILTRATION PLANT
(Baldwin Filtration Plant & Reservoir of
the Cleveland Water Supply System)
Kentucky (38th Street) and Frankling Streets,
Division Ave.
Cleveland
Cuyahoga County
Ohio

HAER No. OH-3 (Page 5)

OH-3-1 through OH-3-41 were previously transmitted to the Library of Congress.

INDEX TO COLOR TRANSPARENCIES

All color xeroxes were made from a duplicate color transparency.

Photographer: Jet Lowe, Summer 1978.

OH-3-42 (CT)

VIEW OF CHEMICAL MIXER FROM ATOP CHEMICAL SPRAY NOZZLES

- OH-3-9 JL photographer, summer 1978. General view of pumping room in pumping station from second tier.
- OH-3-10 Photocopy of original photograph in Cleveland Public Library Cleveland Picture Collection (CPL,CPC), date of original unknown, showing engine houses 1, 2, and 3, the fully developed 19thcv Division avenue pumping station before construction of present plant. This plant was demolished.
- OH-3-11 Photocopy of original in CPL,CPC of first Cleveland water works engine house at Kentucky Street and Lakefront. Photo c 1856, 1857. Photo taken from the south; the building housed two cornishsteam engines.
- OH-3-12 Photocopy of original in CPL,CPC showing view of walkway on top of Kentucky Street Reservoir, W 38th and Franklin Streets. Reservoir in operation between 1856-1886.
- OH-3-13 Photocopy of original photograph in collection of John Nash, Cleveland Water Department, showing Allis Chalmers triple-expansion steam engine at the Division Avenue Plant. Photo ca. 1900-1920. Engine now demolished.
- OH-3-14 Photocopy of original photograph in collection of John Nash, Cleveland Water Department, showing concrete block setter used in construction of tunnel under Lake Erie from crib #2 to crib #5 (1913-1916).
- OH-3-15 Photocopy of engineering drawing F-790 in files of Utilities Engineering files in Cleveland of the Allis-Chalmers steam engine. This side elevation of the engine in the Division Avenue plant is the last remaining drawing of them in existence. The engine was dismantled. Date of drawing is 1914.
- OH-3-16 Photocopy of drawing # F-1103 in files of Utilities Engineering Department in Cleveland showing water flow diagram in the Division Avenue Plant. Drawing dated March 11, 1921. Flow is still in existence.
- OH-3-17 Photocopy of drawing # L-142 in files of Utilities Engineering files in Cleveland showing section and plan of Filtration Plant (Division Avenue). Drawing dated 1914.
- OH-3-18 Photocopy of drawing #F-859 in files of Utilities Engineering Department in Cleveland of West Elevation and Details of Division Avenue Pumping Station. Drawing dated 1914.

(continued)

Photocopy of drawing # L-141 in files of Utilities Engineering Department in Clevealnd showing General Plan of Division Avenue Filtration Plant. Drawing dated 1914. OH = 3 - 20Photocopy of drawing # L-145 in files of Utilities Engineering Department in Cleveland showing sections of interior trusses of Division Avenue Filtration Plant. Drawing dated 1914. OH-3-21Photocopy of drawing in files of Utilities Engineering Department in Cleveland showing section of Coal Weighing hoppers in Division Avenue Pumping station. Drawing dated 1915. OH-3-22 Photocopy of original drawing in files of Utilities Engineering Division in Cleveland showing proposed arrangement of Holly Engine in Old Division Avenue Plant. Drawing dated 1900. Photocopy of drawing in files of Utilities Engineering OH-3-23 Department in Cleveland showing proposed location and shafting of 5x7 tunnels leading to the Division Avenue Pumping Station. Drawing dated 1914. OH-3-24 Photocopy of original photograph in collection of John Nash, Cleveland Water Department showing tunnel construction scene in East Side Lake tunnel ca. 1900. OH-3-25 Photocopy of original photograph in collection of John Nash, Cleveland Water Department showing meter calibrating equipment in the Water Department ca. 1930s. OH-3-26 Photocopy of original photograph in collection of John Nash, Cleveland Water Department showing nine foot tunnel under Lake Erie for water supply. location is al Crib #1. photo undated. Photocopy of drawing L-910 showing West elevation of Filter OH - 3 - 27building, Baldwin Filtration Plant. Drawing dated 1924. Original drawing in Utilities Engineering Division, Celveland.

> Photocopy of drawing L-1100 in Utilities Engineering Division, Cleveland Public Works showing plan and section of chemical house and mixing chambers at BAldwin Filtration Plant. Drawing

(continued)

dated 1924.

OH-3-28

OH-3-19

OH-3-29	Photocopy of drawing L-1314 showing detail of columns for filtered water reservoir at the Baldwin Filtration Plant. Drawing in Utilities Engineering Department, Cleveland and is dated 1924.
OH-3-30	Photocopy of drawing L-784 in Utilities Engineering, Cleveland showing general plan of Baldwin Filtration Plant. Drawing dated 1923.
OH-3-31	Photocopy of drawing L-974 in Utilities Engineering Department, Cleveland, dated 1927, showing experimental dechlorinating plant, Baldwin Filtration Plant.
OH-3-32	Photocopy of drawing in Utilities Engineering Department, Cleveland, dated 1896, showing elevation of iron protection crib #3 and boat landing.
OH-3-33	Photocopy of drawing in Utilities Engineering Department, Cleveland, dated 1916, showing general plan and sections of Baldwin Reservoir.
OH-3-34	PHOTOCOPY of drawing in Utilities Engineering Department, Cleveland, dated 1916, showing plan and sections with proposed roof of Baldwin Reservoir.
OH-3-35	JL photographer, summer 1978, general view of Chemical mixer Baldwin Filtration plant
OH-3-36	JL photographer, summer 1978, general view of experimental ammonia chlorine process equipment from ca 1930's at Baldwin Filtration Plant.
OH-3-37.	JL photographer, summer 1978, general view of Fairmount Reservoir (constructed 1880s; an open reservoir for the Baldwin filtration plant.
OH-3-38	JL photographer, summer 1978, general view of main entrance facade of Baldwin Filtration plant.
OH~3-39	JL photographer, summer 1978, view of covered reservoir at Baldwin filtration plant.
OH-3-40	JL photographer, summer 1978, view of filter gallery at Baldwin filtration plant.
OH-3-41	JL photographer, summer 1978, view of chemical mixer from atop chemical spray nozzels.

HISTORIC AMERICAN ENGINEERING RECORD

INDEX TO PHOTOGRAPHS

ADDENDUM TO:

DIVISION AVENUE PUMPING STATION & FILTRATION

PLANT

(Baldwin Filtration Plant & Reservoir)

West 45th Street and Division Avenue

Cleveland

Cuyahoga County

Ohio

INDEX TO BLACK AND WHITE PHOTOGRAPHS

Jim Mathews, Jeffrey Scott, Score Photographers, photographers, March 2005

ОН-3-43	GENERAL VIEW OF SITE, WITH PUMPING STATION AT LEFT AND CHEMICAL HOUSE AT RIGHT, LOOKING NORTHEAST TOWARD DOWNTOWN CLEVELAND.
OH-3-44	WEST ELEVATION (FACADE), LOOKING EAST.
OH-3-45	WEST AND NORTH ELEVATIONS, LOOKING SOUTHEAST.
OH-3-46	CORNICE AND WINDOW DETAIL, WEST ELEVATION, LOOKING NORTHEAST (LIGHT AND DARK EXPOSURES).
OH-3-47	ENTRANCE DETAIL, LOOKING EAST INTO MAIN PUMPING HALL.
OH-3-48	SOUTH AND EAST ELEVATIONS, LOOKING WEST. BOILER HOUSE IS AT RIGHT.
OH-3-49	EAST ELEVATION, LOOKING WEST. BOILER HOUSE PROJECTS FROM CENTRAL BAY.
OH-3-50	BOILER HOUSE FACADE DETAIL.

DIVISION AVENUE PUMPING STATION & FILTRATION

HAER OH-3

INDEX TO PHOTOGRAPHS

OH-3-51	NORTH AND EAST ELEVATIONS, LOOKING SOUTHWEST. THE ONE-STORY BUILDING (WITH VENTILATORS) AT RIGHT IS THE FORMER SCREEN WELL HOUSE. AT CENTER IS THE GAS METER BUILDING. AT LEFT, IN FOREGROUND, IS A FORMER GUARD STATION OF RECENT CONSTRUCTION. (THE GUARD STATION WAS RELOCATED FOLLOWING THE 9/11 TERRORIST ATTACKS.) AT FAR RIGHT (WITH CRANE), THE NEW PUMPING STATION NEARS COMPLETION.
ОН-3-52	FILTERED WATER RESERVOIR, LOOKING NORTHWEST. A CORNER OF THE NEW PUMPING STATION IS VISIBLE AT RIGHT.
ОН-3-53	MAIN ENGINE ROOM, LOOKING NORTH. THIS ROOM ONCE HOUSED SIX STEAM PUMPING ENGINES.
OH-3-54	MAIN ENGINE ROOM, LOOKING SOUTH.
ОН-3-55	STAIRWAY DETAIL, NORTHEAST CORNER OF THE MAIN ENGINE ROOM, LOOKING NORTHEAST.
Jim Mathews, Jeffrey Scott,	Score Photographers, photographers, November 2005
ОН-3-60	PHOTOCOPY OF DRAWING NO. F-809, DIVISION AVENUE STATION, MAIN FLOOR PLAN, DEC. 1, 1914. COURTESY OF THE DEPARTMENT OF PUBLIC UTILITIES, DIVISION OF WATER, CITY OF CLEVELAND.
ОН-3-61	PHOTOCOPY OF DRAWING NO. F-860, DIVISION AVENUE STATION, EAST ELEVATION AND DETAILS, DRAWN BY W.H.C., MAR. 22, 1915. COURTESY OF THE DEPARTMENT OF PUBLIC UTILITIES, DIVISION OF WATER, CITY OF CLEVELAND.
ОН-3-62	PHOTOCOPY OF DRAWING NO. F-861, DIVISION AVENUE STATION PAVILION, ELEVATIONS AND DETAILS OF MAIN ENTRANCE DOORS, DRAWN BY W.H.C., MAR. 20, 1915. COURTESY OF THE DEPARTMENT OF PUBLIC UTILITIES, DIVISION OF WATER, CITY OF CLEVELAND.

DIVISION AVENUE PUMPING STATION & FILTRATION HAER OH-3 INDEX TO PHOTOGRAPHS

ОН-3-63	PHOTOCOPY OF DRAWING NO. F-862, DIVISION AVENUE STATION, SOUTH AND EAST ELEVATION AND SECTION THRU TRACK SHELTER BOILER ROOM, MAR. 10, 1915. COURTESY OF THE DEPARTMENT OF PUBLIC UTILITIES, DIVISION OF WATER, CITY OF CLEVELAND.
ОН-3-64	PHOTOCOPY OF DRAWING NO. F-1105, DIVISION AVENUE STATION, TRANSVERSE SECTION THRU BOILER ROOM (LOOKING EAST), APR. 13, 1921. COURTESY OF THE DEPARTMENT OF PUBLIC UTILITIES, DIVISION OF WATER, CITY OF CLEVELAND.
ОН-3-65	PHOTOCOPY OF DRAWING NO. F-1106, DIVISION AVENUE STATION, LONGITUDINAL SECTION THRU BOILER ROOM (LOOKING NORTH), MAY 11, 1921. COURTESY OF THE DEPARTMENT OF PUBLIC UTILITIES, DIVISION OF WATER, CITY OF CLEVELAND.
Jim Mathews, Jeffrey Scott,	Score Photographers, photographers, September 2005
ОН-3-56	GARRETT A. MORGAN WATER TREATMENT PLANT, LOOKING NORTHWEST FROM BERM OF WEST SHOREWAY. DIVISION AVENUE PUMPING STATION AT RIGHT. NEW PUMPING STATION, NEARING COMPLETION, AT LEFT.
ОН-3-57	GARRETT A. MORGAN WATER TREATMENT PLANT, LOOKING NORTHEAST FROM BERM OF WEST SHOREWAY, SHOWING DIVISION AVENUE PUMPING STATION (AT LEFT), FILTRATION PLANT (CENTER), AND CHEMICAL HOUSE (IN SHADOW AT RIGHT).
ОН-3-58	GARRETT A. MORGAN WATER TREATMENT PLANT, LOOKING NORTH FROM BERM OF WEST SHOREWAY, SHOWING CHEMICAL BUILDING (AT LEFT), FLOCCULATION BUILDING (RIGHT FOREGROUND), AND FILTRATION ADMINISTRATION BUILDING (AT RIGHT, BEYOND FLOCCULATION BUILDING).

DIVISION AVENUE PUMPING STATION & FILTRATION HAER OH-3 INDEX TO PHOTOGRAPHS

OH-3-59

GARRETT A. MORGAN WATER TREATMENT PLANT, LOOKING NORTHWEST FROM BERM OF WEST SHOREWAY, SHOWING (CLOCKWISE FROM LEFT) CHEMICAL BUILDING, PUMPING STATION, FILTRATION/ADMINISTRATION BUILDING, AND FLOCCULATION BUILDING (IN FOREGROUND).

HISTORIC AMERICAN ENGINEERING RECORD

INDEX TO PHOTOGRAPHS

ADDENDUM TO: HAER OH-3

DIVISION AVENUE PUMPING STATION & FILTRATION

PLANT

(Baldwin Filtration Plant & Reservoir)

West 45th Street and Division Avenue

Cleveland

Cuyahoga County

Ohio

INDEX TO COLOR TRANSPARENCIES

Jim Mathews, Jeffrey Scott, Score Photographers, photographers, March 2005

OH-3-66 (CT) GENERAL VIEW OF SITE, WITH PUMPING STATION AT

LEFT AND CHEMICAL HOUSE AT RIGHT.

HISTORIC AMERICAN ENGINEERING RECORD

INDEX TO PHOTOGRAPHS

ADDENDUM TO: HAER OH-3

DIVISION AVENUE PUMPING STATION & FILTRATION

PLANT

(Baldwin Filtration Plant & Reservoir)

(Baldwin Filtration Plant Chemical House)

West 45th Street and Division Avenue

Cleveland

Cuyahoga County

Ohio

Photographs HAER OH-3-1 through HAER OH-3-66 were previously transmitted to Library of Congress.

INDEX TO BLACK AND WHITE PHOTOGRAPHS

Jim Mathews, Jeffrey Scott, Score Photographers, photographers, August 2007

ОН-3-67	General view of site. Chemical House is in the distance at left, Administration/Filter Building at right. Looking northwest. Baldwin Reservoir lies beneath the greensward
ОН-3-68	Northeast (Reservoir) and southeast elevations, Chemical House and mixing chambers, looking west
ОН-3-69	Northwest and southwest elevations, looking east from Woodstock Avenue
OH-3-70	Northwest elevation, looking southeast
ОН-3-71	Southeast elevation, looking northwest toward mixing chamber and Chemical House from the roof of gate house no. 1
ОН-3-72	Southeast elevation, Chemical House, looking northwest from the roof of the mixing chamber
ОН-3-73	Third floor, showing monorail system, scale (center left), alum dump bucket, and dissolving tanks
ОН-3-74	Wet well, inside Chemical House, looking northeast
ОН-3-75	Dry carbon feeder

DIVISION AVENUE PUMPING STATION & FILTRATION

HAER OH-3 INDEX TO PHOTOGRAPHS Page 12

	- "B" -
ОН-3-76	One of two rotodip feeders used to control addition of alum solution into the water
ОН-3-77	Wet well, inside the mixing chamber, looking back toward Chemical House
OH-3-78	General view of the mixing chamber, looking southeast from the Chemical House toward the flumes, or hydraulic jumps
OH-3-79	Mixing chamber, looking back toward Chemical House. In foreground is middle of three flumes, or hydraulic jumps
OH-3-80	Mixing chamber, looking west with flume in foreground
ОН-3-81	Alum storage building, west and south elevations, looking northeast